

Appl. No. 10/777,990  
Response dated: August 4, 2005  
Reply to Office action of May 4, 2005

**Amendment to the Drawings**

Please amend Figure 9 to change "ANUPPER" in Step S12 to "AN UPPER". No new matter has been added. A clean replacement sheet is provided herewith.

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#### REMARKS

In response to the Office Action dated May 4, 2005, Applicants respectfully request reconsideration based on the above claim amendments and the following remarks. Applicants respectfully submit that the claims as presented are in condition for allowance.

Claims 1-20 are pending in the present Application. Claims 1, 6, 10, 12-14 and 18 have been amended, Claim 5 has been canceled, and Claims 21-23 have been added leaving Claims 1-4 and 6-23 for consideration upon entry of the present amendments and following remarks.

Support for the claim amendments can at least be found in the specification, the figures, and the claims as originally filed. Particularly, support for amended Claim 1 can at least be found in originally filed Claim 5. Support for amended Claims 10 and 18 can at least be found in originally filed Figures 9 and 10a-10c. Support for amended Claims 12 and 13 can at least be found in the originally filed specification at page 15, lines 2-6 and Figures 1 and 9. Claims 6 and 14 are amended to provide proper antecedent basis.

The specification is also amended to correct inadvertent spelling and grammatical errors.

No new matter has been introduced by these amendments. Reconsideration and allowance of the claims are respectfully requested in view of the above amendments and the following remarks.

#### Drawings

The drawings are objected to because "ANUPPER" in Step S12 of Figure 9 should be "AN UPPER." In reply, Applicants hereby submit corrected drawing sheets in compliance with 37 C.F.R. 1.121(d). The amended drawing sheet includes all of the figures appearing on the immediate prior version of the sheet. The replacement sheets are labeled "Replacement Sheet" in the page header (as per 37 C.F.R. §1.84(c)). Consideration and entry of the amended Figure 9 is respectfully requested.

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**Claim Objections**

Claims 1, 12-14 and 18 are objected to because of various informalities. Applicant respectfully thanks the Examiner for providing suggested language and herein amends Claims 1, 12-14 and 18 accordingly. Reconsideration and withdrawal of the relevant objections is respectfully requested.

**Claim Rejections Under 35 U.S.C. §102**

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. V. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). It is submitted that Tagusa fails to teach each and every element as set forth in the Claim 1 for at least the reasons described below.

**Regarding Claims 1-7 and 9**

Claims 1-7 and 9 are rejected under 35 U.S.C. §102(b) as being anticipated by Shimada et al., U.S. Patent No. 5,576,730 (hereinafter "Shimada"). Claim 5 has been canceled without prejudice.

Applicant has amended Claim 1 to recite, *inter alia*,

"...an inspecting pad part extended from the inspection line so as to provide the first inspection signal to the inspection line, wherein the inspection line comprises:  
a plurality of input lines connected to the driving part and spaced apart from each other in a predetermined distance; and  
a connecting line electrically connected between the input lines, and electrically connected between the input lines and the inspecting pad part."

Shimada discloses the gate driving circuit 5 is constituted by a shift register formed on the base panel 22, and is drive by an external power source and controlled by a start signal, a clock signal or the like externally supplied. (Col. 6, lines 54-58.) Shimada discloses in Figure 1 lines connected to the gate driving circuit 5 for GND, VDD, CLK and START. The lines are

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clearly shown spaced apart and insulated from each other, with no connecting line between the lines. That is, Shimada fails to at least teach a connecting line electrically connected between the input lines, and electrically connected between the input lines and the inspecting pad part as recited in amended Claim 1.

Thus, Shimada does not disclose all of the limitations of amended Claim 1. Accordingly, Shimada does not anticipate amended Claim 1. Applicant respectfully submits that amended Claim 1 is allowable. As Claims 2-4, 6, 7, and 9 variously depend from allowable Claim 1, they are thus correspondingly allowable. Reconsideration and allowance of Claims 1-4, 6, 7, and 9 is respectfully requested.

Regarding Claims 10-20

Claims 10-20 are rejected under 35 U.S.C. §102(e) as being anticipated by Kim, U.S. Patent No. 6,781,403 (hereinafter "Kim").

Amended Claim 1 recites, *inter alia*,

"...a lower substrate having an inspection line receiving a first inspection signal externally provided, a driving part outputting a second inspection signal in response to the first inspection signal provided through the inspection line...and...

the driving part has a plurality of first switching devices formed on the lower substrate, and the pixel part has a plurality of second switching devices formed on the lower substrate."

Amended Claim 18 recites, *inter alia*,

"...the lower substrate having an inspection line receiving a first inspection signal externally provided, a driving part outputting a second inspection signal in response to the first inspection signal provided through the inspection line...and....

providing the first inspection signal to the inspection line to inspect the driving part and pixel part...and...

the driving part and the pixel part are formed on the lower substrate."

Kim discloses each gate drive IC 16 sequentially applying a scanning signal to a gate line 20 in response to input control signals. (Col. 3, lines 9-11.) A LOG-type signal line group 26, for transferring gate-driving signals applied to the gate drive IC 16, is positioned at the outer edge of the lower substrate 2. (Col. 2, lines 48-51.) The gate driving signal transmission group 22 applies gate driving signals from the timing controller and the power supply, *via the data PCB*

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12, to the LOG-type signal line group 26. (Col. 2, lines 61-64.) LOG-type signal line group 26 is cited by the Examiner as teaching the "inspection line" of the claimed invention. Applicant notes that Figures 1 and 2 cited as teaching the claimed invention describe prior art and not the invention of Kim.

As further described in the Abstract on Page 1, Kim discloses at least two gate-shortening bars and two data-shortening bars apply a test signal by separating the gate lines and data lines, respectively, into two groups. While Figure 3 shows the shortening bars 42 and 44, the order of the signal transmission discussed above is not changed.

As discussed above and further shown in at least Figure 1, the signals from the timing controller and power supply, go through the data PCB 12, the gate driving signal transmission group 22, through the LOG-type signal line group 26, finally to gate driver IC 16. That is, the signals to the inspection line are not *externally* provided as claimed. Thus, Kim fails to at least teach a lower substrate having an inspection line receiving a first inspection signal externally provided as recited in amended Claims 10 and 18.

Kim further discloses that the gate TCP 14 *supports* gate drive IC 16. (Col. 3, line 1.) That is, the gate drive IC mounted on the TCP 14, not the lower substrate as recited in amended Claims 10 and 18.

Thus, Kim does not disclose all of the limitations of amended Claims 10 and 18. Accordingly, Kim does not anticipate amended Claims 10 and 18. Applicant respectfully submits that amended Claims 10 and 18 are allowable. As Claims 11-17 and 19-20 variously depend from allowable Claims 10 and 18, respectively, they are thus correspondingly allowable. Reconsideration and allowance of Claims 10-20 is respectfully requested.

Allowable Subject Matter

Applicant gratefully acknowledges the Examiner's noting the allowable subject matter in Claim 8, but Applicant respectfully submits that independent Claim 1, from which Claim 8 variously depends, is not anticipated by Shimada, as discussed above. As such, Applicants have not rewritten Claim 8 in independent form at this time.

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**Conclusion**

In view of the foregoing, it is respectfully submitted that the instant application is in condition for allowance. Accordingly, it is respectfully requested that this application be allowed and a Notice of Allowance issued. If the Examiner believes that a telephone conference with Applicants' attorneys would be advantageous to the disposition of this case, the Examiner is cordially requested to telephone the undersigned.

In the event the Commissioner of Patents and Trademarks deems additional fees to be due in connection with this application, Applicant's attorney hereby authorizes that such fee be charged to Deposit Account No. 06-1130.

Respectfully submitted,

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